## (12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

## (19) World Intellectual Property Organization International Bureau

(43) International Publication Date

13 May 2004 (13.05.2004)





PCT

## (10) International Publication Number WO 2004/039308 A2

(51) International Patent Classification7:

A61K

Jerusalem (IL). YARKONI, Shai [IL/IL]; 33 Lamed Hey Street, 44395 Kfar Saba (IL).

(21) International Application Number:

PCT/IL2003/000900

(74) Agent: WEBB, Cynthia; Webb & Associates, P.O. Box 2189, 76121 Rehovot (IL).

(22) International Filing Date: 30 October 2003 (30.10.2003)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

60/422,487

31 October 2002 (31.10.2002)

(71) Applicants (for all designated States except US): STATE OF ISRAEL, MINISTRY OF AGRICULTURE [IL/IL]; Agricultural Research Organization, Volcani Center, P.O. Box 6, 50250 Bet Dagan (IL). HADASIT MEDICAL RE-SEARCH SERVICES AND DEVELOPMENT LTD. [IL/IL]; P.O. Box 12000, 91120 Jerusalem (IL). COLL-GARD BIOPHARMACEUTICALS LTD. [IL/IL]; 1B Bazel Street, Kiryat Arie, 49170 Petach Tikva (IL).

- (72) Inventors; and
- (75) Inventors/Applicants (for US only): PINES, Mark [IL/IL]; 8 Hasigaliot Street, Havazelet, 76605 Rehovot (IL). NAGLER, Arnon [IL/IL]; 46 Sderot Herzl, 74381

- (81) Designated States (national): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (regional): ARIPO patent (BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

## Published:

without international search report and to be republished upon receipt of that report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: QUINAZOLINONE COMPOSITIONS FOR REGULATION OF GENE EXPRESSION RELATED TO PATHOLOGI-CAL PROCESSES

(57) Abstract: The present invention relates to pharmaceutical compositions for modifying gene expression in a pathological process, thereby preventing or ameliorating said process. More particularly the compositions comprise quinazolinones, especially halofuginone, for inhibiting or preventing alterations in gene expression during fibrosis. The present invention particularly relates to pharmaceutical compositions for improving the regeneration of cirrhotic liver.